

Methods: The palmar aspect of the outer gloves was pierced and each system was worn by a blinded demonstrator. A blinded observer was then given 2 seconds to identify any breach. If none was identified an extended period of observation was permitted. Forty observations were made for each glove system.

Results: In the Biogel group, 37 out of 40 breaches were identified within 2 seconds, with 3 discovered on extended observation. In the protegrity group, 25 out of 40 breaches were identified initially, with 4 on extended observation. Using the chi-squared test, Biogel is shown to perform significantly better on both immediate inspection ($p=0.0032$) and extended observation ($p=0.0012$.)

Conclusion: Using Protegrity gloves >25% of breaches during surgery may be missed. The use of these new gloves represents a significant decrease in patient and doctor safety and we recommend a return to the use of Biogel gloves.

0139 EXPOSURE TO UROLOGY IN UK MEDICAL STUDENTS. TIME FOR CHANGE?

Laura Derbyshire, Kieran O'Flynn. *Salford Royal NHS Foundation Trust, Salford, North West, UK*

Introduction: Urology accounts for 20% of acute surgical referrals. It is undersubscribed for specialist training. Lack of exposure at undergraduate level may be responsible. We assessed UK medical students' exposure to Urology.

Methods: 32 UK medical schools were contacted. Final year students were asked to complete an online survey about their Urology exposure.

Results: 610 responses received (median 18 per medical school). Experience - 42% of respondents had a compulsory clinical attachment in Urology, lasting on average 1 week. Attendance at common Urological activities was >50%, but 6% had not attended any. Teaching - >80% had been taught about common Urological topics, except for Urological emergencies (62%). Lectures were the main teaching method. 87% received teaching from Urologists.

Confidence - respondents felt confident managing most Urological problems, but 32% felt 'not very confident' with Urological emergencies. Careers - 25% of respondents were considering surgery as a career, 14% for Urology. Reasons for not choosing Urology include other careers choices, lifestyle issues and inadequate knowledge/ experience.

Conclusion: Teaching and clinical experience in Urology are not compulsory in UK medical schools and exposure is variable. Final year students lack confidence in managing Urological emergencies. There is need for a Urology undergraduate curriculum.

0142 SILENT CEREBRAL EVENTS IN ASYMPTOMATIC CAROTID STENOSIS

Gayani Jayasooriya, Ankur Thapar, Joseph Shalhoub, Alun Davies. *Department of Vascular Surgery, Charing Cross Hospital, Imperial College London, London, UK*

Background: There is a need to identify individuals with asymptomatic carotid stenosis at high risk of future ischaemic events to improve the benefit of intervention in this group. We examined the evidence for subclinical microembolisation and silent brain infarction in the prediction of stroke in asymptomatic carotid stenosis using transcranial Doppler (TCD), computed tomography (CT) and magnetic resonance imaging (MRI).

Methods: The review was conducted according to PRISMA guidelines. 58 articles regarding humans between 1966–2010 were identified through systematic searches of Pubmed, MEDLINE and EMBASE electronic databases.

Results: A median of 28% of microemboli positive patients experienced a stroke or transient ischemic attack (TIA) during follow-up versus 2% of microemboli negative patients ($p=0.001$). A median of 10% of microemboli positive patients experienced stroke alone versus 1% of microemboli negative patients ($p=0.004$). No convincing data exists for routine use of CT to predict stroke or TIA. There are no prospective MRI studies linking silent infarction and stroke risk.

Conclusion: There is level 1 evidence for the use of TCD to detect microembolisation as a risk stratification tool. This technique requires further

investigation as a stroke prevention tool and would be complemented by improvements in carotid plaque imaging.

0144 MICROSURGICAL TRAINING – THE NEWCASTLE EXPERIENCE

James Wokes, David Sainsbury, Simon Filson, Omar Ahmed, Richard Milner, Maniram Ragbir. *Royal Victoria Infirmary, Newcastle, UK*

Introduction: Proficient microsurgery requires adequate training. However, there is little literature regarding outcomes when trainee surgeons perform microsurgery. We present our unit's experience.

Methods: Data was prospectively collected on all free flaps performed in Newcastle Hospitals from January 2007–December 2010. Demographics and surgical outcomes were analysed.

Results: 409 patients underwent free flap surgery. 382 (239 female, 143 male) patients had surgeon specific details recorded. Of these, the median age was 53 years (1–96). Operative indications included: breast reconstruction ($n=170$), head & neck oncology ($n=109$), lower limb trauma ($n=33$) and other ($n=70$).

The percentage of trainees performing flap raising was 40.6%(155/382), arterial anastomosis was 19.9%(76/382), first venous anastomosis was 13.1%(50/382), second venous anastomosis was 45.6%(31/68) and vessel preparation was 10.7%(41/382). We subdivided our results into TRAM, DIEP, ALT, RFF, LD and other flaps.

The median operative and ischaemic times were 487.7 ± 116 and 77.9 ± 35.1 minutes, respectively. No statistically significant difference was found in operative time, ischaemic time, complications or return to theatre rates when microsurgical procedures were performed by Consultants or trainees.

Conclusion: In our unit operative time, ischaemic time and complications do not appear significantly increased when parts of microsurgical operations are performed by surgeons in training. These findings provide a baseline for future studies.

0148 KARYDAKIS FLAP IN THE TREATMENT OF PILONIDAL SINUS DISEASE

Chris Johnston. *Norfolk and Norwich University Hospital, Norwich, UK*

Background: Pilonidal sinus disease (PSD) involves chronic granulomatous infection thought to be caused by penetration of a foreign body, usually hair, into the subcutaneous tissues. Surgical treatment of chronic PSD is controversial, with variable rates of complications. The Karydakakis procedure is an asymmetrical flap that avoids a midline wound. This study looks at our experience with the Karydakakis procedure.

Methods: Patients with PSD who had an elective Karydakakis procedure performed by a single surgical firm were identified between 2001 and 2008. These case notes were then reviewed to compile data regarding complications, primary healing rates, and recurrence.

Results: 38 patients were identified as having primary closure with Karydakakis flap. 2 patients experienced recurrence, 3 developed a haematoma, 1 developed a seroma, and 4 superficially infected.

Conclusion: In the current study, > 90% of cases were asymptomatic at follow-up appointment. The low rates of complications (10 – 20%) and recurrence (5%) in the audit are comparable with other reports. The low incidence of post-operative complications and recurrence in this series emphasize the benefits of the Karydakakis technique in the surgical treatment of PSD. This audit adds further evidence this straight forward technical procedure should be being adapted in other centres.

0162 SURGICALLY PLACED WOUND CATHETERS (SPWC) AND LOCAL ANESTHETIC INFUSION IN BREAST SURGERY – EFFICACY AND SAFETY ANALYSIS

Guru G.K. Raghavendra¹, Roopa Harlur Sreenivasa³, Kiran Ashok², Praminthra Chitsabesan³, Neil McLean¹, Magdi Youssef¹. ¹Wansbeck General Hospital, Ashington, UK; ¹University hospital of Greifswald, Greifswald, Germany; ¹Northern Deanery, Newcastle Upon Tyne, UK

Background: The effectiveness of surgically placed wound catheters (SPWC) and local anesthetic infusion in the management of post-operative pain